

Abstract of the Disclosure

In a coating and developing treatment for a substrate, the present invention comprises the steps of: supplying a coating solution to the substrate to form a coating layer on the substrate; performing a developing treatment for the substrate in the processing zone after it undergoes an exposure processing by an aligner not included in the system; and carrying the substrate into the chamber after the step of forming the coating layer and before the exposure processing and thereafter reducing the pressure inside the airtightly closed chamber to a predetermined pressure to remove impurities adhering to the substrate inside the chamber from the substrate for a predetermined time, wherein the predetermined pressure and the predetermined time are adjusted based on the density of the impurities measured inside the processing zone.

According to the present invention, impurities at a molecule level such as moisture, vapor, oxygen, ozone, and organic substance, and impurities such as fine particles, which adhere to the coating layer of the substrate, can be removed before the exposure processing so that the exposure processing can be performed in a preferable condition. Since the pressure, time, and pressure-reducing speed at the time of reducing the pressure are adjusted based on the density of the impurities measured in a predetermined position, the impurities adhering to the substrate such as moisture and oxygen can be removed under a preferable minimum requirement condition according to the adhering amount of the impurities.